

Modular Training Standards

**Common Core for
Non-Production Workers
in a Smelter Operation –
Mineral Ore**

Ministry of Training,
Colleges and Universities

Modular Training Standards

**Common Core for
Non-Production Workers
in a Smelter Operation –
Mineral Ore**

Program #810090

Development date: May 1999

Printing date: June 2000

This document is the property of the trainee/
employee named inside and represents the
official record of his/her training.



**COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION -
MINERAL ORE**

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COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION - MINERAL ORE

SIGNING AUTHORITY REQUEST

In order to attest to competency of employees, a company must submit written application for signing authority to the local Apprenticeship office.

REGISTRATION

Where accreditation is required and/or desired, the worker/trainee must be registered with the Ministry of Training, Colleges and Universities Apprenticeship and Client Services Branch in the local area.

ACCREDITATION

The Ministry of Training, Colleges and Universities will issues a Certificate of Achievement to the worker/trainee upon proof of successful attainment of the Common Core.

Accreditation Requirements for the Common Core for Non-Production Workers in a Smelter Operation - Mineral Ore Program.

Who Qualify – who is this training intended for?

- process engineers, process technologists, specialists
- 2nd line supervisors
- yard and/or outside services
- trades persons including: millwrights; electricians; instrumentation technologists and stationary engineers.

To qualify for a Certificate of Achievement – for the Common Core for Non-Production Workers in a Smelter Operation - Mineral Ore Program , each of the following modules must be completed:

U1590	Safety-protect Self and Others
U1591	Work Safely in a Smelter Environment
U1596	Deal with Designated and other Hazardous Substances
U1597	Operate Elevators

COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION - MINERAL ORE

MODULAR TRAINING TERMS

Modular Training:	a self-paced, performance-based training system which provides workers/trainees with knowledge, skills and attitudes to be competent workers.
Module:	a training unit comprised of Tasks/Skills, Enabling Objectives, and Terminal Performance Objectives. The Enabling Objectives describe prerequisite skills and the knowledge required to meet the minimum standards of competency stated in the Terminal Performance Objectives. Performance Demonstration Guidelines are a means a evaluating skills through observed practical performance for determining the achievement of the prescribed Terminal Performance Objectives.

Definitions

And/or:	one or both;
As applicable:	to complete the items that apply to a particular operation; may not apply to all operations;
As it/they relate:	must include all items listed;
As required:	to be demonstrated as required by a situation/ the company or legislation. May not apply to all companies;
Demonstrate a Knowledge:	do hands on demonstration or verbal and/or written test;
Demonstrate Skills required:	do hands on demonstration;
Demonstrate the Procedure:	do hands on demonstration;
Determine:	ascertain, find out or establish a knowledge in;
Ensuring:	the skill described may either be demonstrated by the worker/trainee, or be ensured by one that it has been properly done;
Recognize/Identify:	demonstrate a knowledge of;
Such as:	one, or more, or all the items listed, but is not limited to the list only;
Which shall Include:	the items listed, and may be added to by the company, if procedures warrant;
With respect to:	must include all items listed.

COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION - MINERAL ORE

PREFACE

The Ministry of Training, Colleges and Universities is grateful for the contribution of the members of the Training Standards Development Committee, in the development of the Common core for Basic Smelter Operations - Mineral Ore Training Program from which this program for non-production workers was developed.

COMPANY REPRESENTATIVES:

M. A. McDonald	Falconbridge Ltd., Falconbridge Smelter
D. Naykalyk	INCO Ltd., INCO Copper Cliff Smelter
E. Vehkalahti	Falconbridge Ltd., Kidd Creek Smelter Division
R. Coté	Falconbridge Ltd., Kidd Creek Smelter Division
S. Kirwan	Falconbridge Ltd., Falconbridge Smelter
B. Morris	Falconbridge Ltd., Kidd Creek Smelter Division

UNION REPRESENTATIVES:

W. Bronicheski	Falconbridge Ltd., (Sudbury Mine, Mill & Smelter Workers Union Local 598, Canadian Auto Workers, TCA Canada)
B. Robinson	Falconbridge Ltd., (Sudbury Mine, Mill & Smelter Workers Union Local 598, Canadian Auto Workers, TCA Canada)
P. Carriere	Falconbridge Ltd., (United Steel Workers of America, Local 6855)
R. Lauzon	Falconbridge Ltd., (United Steel Workers of America, Local 6855)
D. Hinds	INCO Ltd., (United Steel Workers of America, Local 6600)
C. L. Fraser	INCO Ltd., (United Steel Workers of America, Local 6500)
F. Tulk	INCO Ltd., (United Steel Workers of America, Local 6500)
K. Grenke	Falconbridge Ltd., Kidd Creek Smelter Division, (Canadian Auto Workers, TCA Canada)

GOVERNMENT REPRESENTATIVES:

C. Kennedy	Ministry of Labour
A. Jennings	Ministry of Labour
K. Holmesshaw	Ministry of Training, Colleges, and Universities
M. Foster-Chandler	Ministry of Training, Colleges, and Universities

RESOURCE PERSONS

R. Hurme	Falconbridge Ltd.
P. Foucault	Falconbridge Ltd.
S. Pasierowski	INCO Ltd
R. Girard	Noranda Mineral

COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION - MINERAL ORE

IMPORTANT DIRECTIONS TO TRAINERS

The Training Standards identify skills required for this occupation and its related training program.

These Training Standards have been written in concise statements which describe how well a trainee must perform each skill in order to become competent.

In using these Training Standards, trainers will be able to ensure that the trainee is developing skills detailed for the occupation.

Trainers and trainees are required to sign off and date the skills following each successful acquisition.

Employers participating in this training program will be designated as the Signing Authority and are required to attest to successful achievement by signing the appropriate box included at the end of each unit.

IMPORTANT DIRECTIONS TO THE TRAINEE

Trainee

1. All hours working for each employer(s) should be recorded in the Employer Information section.
2. It is the responsibility of the trainee to inform the local Apprenticeship Client Services office regarding the following changes:
 - change of trainee name or address;
 - transfer to a new employer.
7. Training Reports must be signed for modular trainees by a MTCU designated Signing Authority and forwarded to a local Apprenticeship Client Services office.
8. At the completion of training, the Trainee Completion Form must be completed and signed off by the Signing Authority and submitted to local Apprenticeship Client Services office.

**COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION -
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NOTICE/DECLARATION FOR COLLECTION OF PERSONAL INFORMATION

1. This information is collected under the authority of the Order-In-Council Number 701/85.
2. The information is collected for the purpose of administering this modular training program within the Province of Ontario.
3. Questions regarding collection and use of this information may be directed to:

Director of Apprenticeship
Workplace Support Services Branch
Ministry of Training, Colleges and Universities
900 Bay Street
17th Floor, Mowat Block
Toronto, Ontario
M7A 1L2
(416) 326-5605

**COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION -
MINERAL ORE**

TRAINEE RECORD

Trainee Name: _____

Contract Number: _____
(If applicable)

EMPLOYER INFORMATION

Company: _____

Address: _____

Telephone: _____

SUMMARY OF HOURS:

Dates of Employment: _____
From To

Total hours of Training and Instruction between dates of Employment _____ Hours

Employer's
Signature

Date

Trainee
Signature

Date

**COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION -
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EMPLOYER INFORMATION

Company: _____

Address: _____

Telephone: _____

SUMMARY OF HOURS:

Dates of Employment: _____
From To

Total hours of Training and Instruction between dates of Employment _____ Hours

_____ Employer's Signature	_____ Date	_____ Trainee Signature	_____ Date
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EMPLOYER INFORMATION

Company: _____

Address: _____

Telephone: _____

SUMMARY OF HOURS:

Dates of Employment: _____
From To

Total hours of Training and Instruction between dates of Employment _____ Hours

_____ Employer's Signature	_____ Date	_____ Trainee Signature	_____ Date
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**COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION -
MINERAL ORE**

EMPLOYER INFORMATION

Company: _____

Address: _____

Telephone: _____

SUMMARY OF HOURS:

Dates of Employment: _____
From To

Total hours of Training and Instruction between dates of Employment _____ Hours

_____ Employer's Signature	_____ Date	_____ Trainee Signature	_____ Date
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EMPLOYER INFORMATION

Company: _____

Address: _____

Telephone: _____

SUMMARY OF HOURS:

Dates of Employment: _____
From To

Total hours of Training and Instruction between dates of Employment _____ Hours

_____ Employer's Signature	_____ Date	_____ Trainee Signature	_____ Date
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**COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION -
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TRAINEE COMPLETION FORM

Trainee Name

Print

Signature

Social Insurance Number

Training Units when completed should be Signed off by Trainer/ Signing Authority on the following page and presented with this completion form to your local Apprenticeship Client Services office. Any supporting documentation should also be attached.

In-School Completed:
(proof to be provided)

Yes () No () Not Applicable ()

Hours completed as
per Contract:

Yes () No () Not Applicable ()

Employer Name:

Address:

Telephone:

Signing Authority:

Signature

MTCU USE ONLY:

Recommended for Exam:

Yes () No ()

Signature

Consultant/Office Code

**COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION -
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TRAINING UNIT COMPLETION FORM

TRAINING UNITS	TITLE	SIGNING AUTHORITY
U1590	Safety-protect Self And Others	_____
U1591	Work Safely in a Smelter Environment	_____
U1596	Deal With Designated And Other Hazardous Substances	_____
U1597	Operate Elevators	_____

COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION - MINERAL ORE

U1590.0 SAFETY-PROTECT SELF AND OTHERS

GENERAL PERFORMANCE OBJECTIVE

Select, adjust, wear, and maintain personal protective equipment and protect self and others in the workplace, by inspecting for hazardous conditions and taking appropriate action to guard and/or remove same. All work must be done in compliance with applicable acts, regulations, standards and company standards.

U1590.01 SELECT, ADJUST, WEAR, AND MAINTAIN HEAD PROTECTORS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the various situations requiring head protectors (ref. O.H.S.A.). Identify the specified head protectors with respect to: • types; • sizes and fits; • materials; • protective features; • applications and limitations; • and, defects. Determine the correct methods of wearing, adjusting, and maintaining specified head protectors.	Select, adjust, wear and maintain head protectors to ensure: • proper fit; • adequate protection compliance with O.H.S.A.; • adherence to company standards.

U1590.02 SELECT, ADJUST, WEAR AND MAINTAIN EYE PROTECTORS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the various situations requiring eye protectors. Identify the specified eye protectors with respect to: • types; - safety glasses clear and/or tinted (complete with side shields) - burning goggles - welders helmet with shield - no goggles - face shields clear and/or tinted • sizes and fit; • protective features; • applications and limitations. Determine the correct methods of selecting,, adjusting, wearing, and maintaining the specified eye protectors.	Select, adjust, wear and maintain eye protectors to ensure: • proper fit; • adequate protection; • adherence to company standards.

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U1590.03 SELECT, ADJUST, WEAR AND MAINTAIN FACE SHIELDS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Identify different face shields with respect to: • types; • sizes and fits; • applications; • protective features; • clear and/or tinted. Determine procedures for wearing, adjusting maintaining and storing face shields and situations requiring the use of same.	Select, adjust, wear and maintain face shields to ensure optimum protection (ref. O.H.S.A.).

U1590.04 SELECT, ADJUST, WEAR AND MAINTAIN FOOT PROTECTORS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the correct method of selecting, wearing, adjusting and maintaining the specific foot protectors with respect to: • types: - shoes; - boots; - rubber boots; - spats; - metatarsal guards. • sizes and fits; • materials; • protective features; • applications and limitations and situation require the use of same (ref. O.H.S.A.).	Select, adjust, wear, and maintain foot protectors to ensure: • correct fit; • optimum protection; • adherence to company standards.

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U1590.05 SELECT, ADJUST, WEAR AND MAINTAIN HEARING PROTECTORS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the various situations requiring hearing protectors. Identify hazards of noise. Identify the specified hearing protectors with respect to: - types such as; - plugs - hat mounted muffs - sizes and fits; - protective features; - and, application and limitations. Determine the correct methods of wearing, adjusting and maintaining specified hearing protectors.	Select, wear, adjust, and maintain hearing protection (plugs and ear muffs) to ensure: - proper fit; - optimum protection; - adherence to company standards; - reduced chronic effects of noise.

U1590.06 SELECT, ADJUST, WEAR AND MAINTAIN RESPIRATORY PROTECTORS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine various situations requiring the use of respiratory protectors (ref. O.H.S.A.). Identify contaminants with respect to types such as: - gas; - vapor; - dust. Determine selection of respirator cartridge. Identify respiratory protectors with respect to types such as: - self-contained breathing apparatus (S.C.B.A.); - respirators (full and half face); - self rescuers; - air supplied purifying helmet; - sizes and fits (fit test); - protective features; - applications and limitations; - and, types of cartridges (and the situation requiring the use of same).	Select, adjust, wear, and maintain respiratory protectors to ensure: - proper fit (conduct field fit test); - optimum protection; - adherence to company standards; - proper cleaning and maintenance.

COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION - MINERAL ORE

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine and apply the methods of selecting wearing, adjusting and maintaining the specified respiratory protectors with respect to: • changing filter(s); • cleaning respirators; • storage of same; • repairing or replacing defective components.	

U1590.07 SELECT, ADJUST, WEAR AND MAINTAIN PROTECTIVE CLOTHING

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the various situations requiring protective clothing. Identify the specified protective clothing with respect to: • types such as: - long underwear; - bailman's jacket; - woolen and/or canvas pants; - disposable coveralls; - shirts and coats. • sizes and fits; • materials; • protective features(acid resistant clothing); • applications and limitations. Determine and apply methods of selecting, wearing, and adjusting, and maintaining the specified protective clothing. Determine the effect of contamination of protective clothing and the procedure for cleaning and storage.	Select, wear, adjust, and maintain protective clothing to ensure: • optimum protection; • proper fit; • adherence to company standards; • cleanliness.

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U1590.08 SELECT, ADJUST, WEAR AND MAINTAIN HAND PROTECTORS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the various situations requiring hand protectors. Identify the specified hand protectors such as: - types: - chemical resistant; - temperature resistant (hot/cold); - rubber/latex; - leather; - cotton; - metal. - sizes and fits; - protective features; - applications and limitations. Determine and apply the correct methods of selecting wearing and maintaining the specified hand protectors.	Select, wear, and maintain hand protectors to ensure: - proper fit; - optimum protection; - adherence to company standards.

U1590.09 PRACTICE PERSONAL HYGIENE

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the effects of contamination on self such as: - dermatitis; - burns; - friction - chemical - heat - cold - electrical - skin absorption and blood absorption; - inhalation; - ingestion; - injection. Drink only from potable water supplies. Determine the situations requiring use of eye washes/safety showers and immersion tubs and procedures for using same.	Practice personal hygiene in the work place by: - washing/showering to avoid contamination; - wearing proper clothing to avoid contamination; - using barrier creams to help prevent absorption of contaminants into the body (as applicable); - ensure clothing and Personal Protective Equipment (PPE) cleaned in proper manner.

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ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the effect of contamination of clothing/personal protective equipment on self and others. Determine the situations requiring the use of barrier creams. Determine company procedures with respect to exposure to contaminants. Determine procedures to avoid contamination from clothing and personal protective equipment including: • changing clothes; • laundering of clothing; • cleaning of personal protective equipment.	

NOTE: *Eat only in designated lunch-rooms. Wash hands and face and remove protective coveralls prior to entering lunch area.*

Do not use compressed air to blow off clothing. Use only approved cleaning agents to clean PPE.

U1590.10 INSPECT THE WORKPLACE FOR HAZARDOUS OR POTENTIALLY HAZARDOUS CONDITIONS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine hazardous or potentially hazardous conditions in the workplace with respect to: • liquid, solids, gases; • molten metal; • environmental: - noise - friction - air - land - dust/fume/smoke/vapor/mist • spills or leaks; - chemicals - liquids - solids - gases - molten metal • high energy sources such as: - friction - electricity - furnace electrodes	Deal with actual or potentially hazardous conditions in the workplace following company procedures which shall include: • observing instructions for safely handling hazardous materials (ref. O.H.S.A.); • reporting hazardous or potentially hazardous conditions to appropriate personnel; • guarding identified hazardous locations (as applicable); • cleaning up spills, leaks (as applicable) • disposing of spilled materials in proper container(s); • evacuating area (as applicable); • ensuring stored static electricity is grounded out; • bleeding off stored pressure air/water; • cleaning up hazardous or potentially hazardous material and disposing of such in a proper and/or recommended fashion.

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ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
- bus bars - cables - temperature (molten metal/radiant/heat) - pressure (air, water, hydraulics) • radiation (gamma gauges etc.); • Electromagnetic fields have the potential to affect the operation of pace makers; • stored energy sources: - electricity (electrostatic) - electrostatic precipitators (E.S.P.) - static electrical charge(s) - mechanical: (air/water stored pressure) - chemicals: (acid to water) Determine procedures for taking appropriate action to remove and/or guard hazardous conditions such as: • cleaning up spills/leaks; • guarding all identified hazardous locations using required rope/barriers and signs where applicable and ensuring necessary follow-up actions to restore safe operating conditions; • observing company emergency procedures.	

U1590.11 RECOGNIZE VISUAL WARNING DEVICES

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the types of visual warning and their applications such as: • safety signs; - informational - directional • lights; - operating - emergency/evacuation • barriers; - guardrails - barricade tape.	Correctly identify visual warning devices with respect to: • operating; • ready; • stop; • emergency warning; • identify appropriate action to be taken upon activation/deactivation (as applicable).

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U1590.12 RECOGNIZE AUDIBLE WARNING DEVICES

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the types of audible warnings and their application such as: - operating - emergency/evacuation.	Correctly identify audible devices with respect to: • horns and/or; • bells and/or; • sirens and/or; • whistles and/or; • buzzers; • public address systems; and take appropriate action when they are activated following company procedures.

U1590.13 FOLLOW COMPANY FIRE PROCEDURES

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine different classes of fires such as: • class A - combustible materials, wood, cloth, paper, rubber and plastics; • class B - fires in flammable liquids, oils, grease, tars, paints, lacquers and flammable gases; • class C - fires which involve energized electrical equipment; • class D - combustible metals. Identify the standard types, sizes, and applications of fire extinguishers and suppressants for: • class "A" fires: - stored pressure - cartridge operated • class "B" fires: - dry chemical cartridge - dry chemical stored pressure - foam (as applicable) • class "C" fires: - dry chemical stored pressure (as applicable) • class "D" fires: - class "D" extinguishing powder Describe the ranges and limitations of various fire extinguishers. Determine methods of maintaining and storing same.	Demonstrate the skills required to follow company procedure which shall include: • locating the fire; • assessing the severity of the fire (minor/major); • taking appropriate action such as: - suppressing minor fire (if possible) - reporting the fire to appropriate personnel immediately - activating fire alarm (as required) - evacuating area and proceeding to designated safe location and awaiting further instructions (as required).

COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION - MINERAL ORE

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine hazards of using water on molten metal fire. Determine the safety precautions when using fire extinguishers including CO₂ hazards and misuse. Determine the safe and efficient methods of combating Class A,B,C, and D fires. Determine company fire and emergency evacuation procedures.	

NOTE: *Water is not to be used on or near electrical equipment.*

U1590.14 LOCK-OUT AND TAG ELECTRICAL EQUIPMENT

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine situations requiring lock-out and tagging procedures with respect to any repair/maintenance of equipment with an electrical power supply (ref. O.H.S.A.). Determine reasons necessitating lock-out and tagging procedures with respect to: • personal safety • safety of others • protection of equipment. Determine the hazards/procedures associated with the locking out and tagging of computer, remote, and radio controlled equipment. Determine lock-out and tagging procedures and safety precautions to be observed with respect to: • isolating the electrical power supply by ensuring: - switch disconnected - breaker shut off - use of isolation bar/scissor locks - attaching of required lock to isolation bar/scissor lock - correct equipment locked out - safety interlock system by-passed (as applicable) - tagging (danger) - test start equipment to ensure isolation; - tagging (informational) - lock(s) and/or tag(s) removed when system(s) restored to normal.	Demonstrate the skills required to lock and tag out electrical equipment as applicable (not to exceed 750V) for repair/maintenance following company procedures (including O.H.S.A.) which shall include: • ensuring personal safety; • ensuring safety of others; • ensuring protection of equipment; • isolating the electrical power supply by ensuring: - switch disconnected - breaker shut off - use of isolation bar/scissor locks - attaching lock(s) to isolation bar/scissor lock - correct equipment locked out - safety interlock system by-passed (if applicable) - tagging (danger, informational) - test start equipment to ensure isolation - no power restoration until all lock(s) / tag(s) removed and system(s) restored to normal • use of lock box(es) (as applicable).

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U1590.15 LOCK-OUT AND TAG MECHANICAL EQUIPMENT

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine situations requiring lock-out and tagging of mechanical equipment with respect to repair/maintenance. Determine the hazardous or potentially hazardous conditions in the workplace with respect to: • stored (potential) energy sources; • electricity; • mechanical equipment; • chemical substance; • pinch points. Determine reasons necessitating lock-out and tagging procedures with respect to: • ensuring that no material can enter the equipment being repaired and or maintained; • shutting down the process as required; • shutting off valves nearest the flange to be blanked; • neutralizing; • double block and bleed. Determine lock-out and tagging procedures and safety precautions to be observed (ref. O.H.S.A.). Determine procedures for: • draining; • flushing; • purging; • depressurizing.	Demonstrate the skills required to lock-out and tag mechanical equipment for repair/maintenance as outlined in the enabling objectives, following company procedures ref. O.H.S.A. which shall include: • ensuring that no material can enter the equipment being repaired/maintained; • shutting down the process if required; • shutting off valves nearest flange to be blanked; • draining, purging, depressurizing and/or flushing of lines prior to repair and/or maintenance to ensure that stored energy is dissipated and/or contained; • locking out valves by means of an appropriate device such as: - chain lock(s) - lockable valve(s) - valve lockout device • tagging (danger/informational); • test start to ensure isolation; • ensuring no restoration of process flows until all blanks, lock(s) and tag(s) removed and system(s) returned to normal. • blocking/chocking; • use of lock box(es) (as applicable).

**COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION -
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PERFORMANCE DEMONSTRATION GUIDELINE

Trainee's / Worker's Name: _____

Emp. # _____

U1590.0 SAFETY-PROTECT SELF AND OTHERS

TASKS	DATE COMPLETED	INSTRUCTOR'S SIGNATURE	TRAINEE'S/ WORKER'S SIGNATURE
U1590.01 Select, Adjust, Wear And Maintain Head Protectors.	-		
U1590.02 Select, Adjust, Wear And Maintain Eye Protectors	-		
U1590.03 Select, Adjust, And Maintain Face Shields.	-		
U1590.04 Select, Adjust, Wear And Maintain Foot Protectors.	-		
U1590.05 Select, Adjust, Wear And Maintain Hearing Protectors.	-		
U1590.06 Select, Adjust, Wear And Maintain Respirators Protectors.	-		
U1590.07 Select, Adjust, Wear And Maintain Protective Clothing.	-		
U1590.08 Select, Wear And Maintain Hand Protectors.	-		
U1590.09 Practice Personal Hygiene.	-		

**COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION -
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CONT'D

PERFORMANCE DEMONSTRATION GUIDELINE

Trainee's / Worker's Name: _____

Emp. # _____

U1590.0 SAFETY-PROTECT SELF AND OTHERS

TASKS	DATE COMPLETED	INSTRUCTOR'S SIGNATURE	TRAINEE'S/ WORKER'S SIGNATURE
U1590.10 Inspect The Workplace For Hazardous or Potentially Hazardous Conditions.	-		
U1590.11 Recognize Visual Warning Devices.	-		
U1590.12 Recognize Audible Warning Devices.	-		
U1590.13 Follow Company Fire Procedures.	-		
U1590.14 Lock-out And Tag Electrical Equipment.	-		
U1590.15 Lock-out And Tag Mechanical Equipment.	-		

COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION - MINERAL ORE

U1591.0 WORK SAFELY IN A SMELTER ENVIRONMENT

GENERAL PERFORMANCE OBJECTIVE

Work safely in a smelter environment. All work must be done in compliance with applicable acts, regulations, standards, and company standards.

U1591.01 DEAL WITH HAZARDOUS / POTENTIALLY HAZARDOUS CONDITIONS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine hazardous or potentially hazardous conditions in the work place (ref. O.H.S.A.) with respect to: • open holes; • low clearance; • ladders and scaffolds; • suspended loads; • improperly located hoses, piping, tools, materials, and equipment; • barricades; • mobile equipment; • spills and leaks such as: - liquid (hydraulic, motor oil) - process gases (SO₂, SO₃, O₂, N₂, NH₃) • reverts; • custom feeds; • O₂ deficiency; • O₂ enriched atmosphere; • by product gases (ozone, H₂S, CO, CO₂); • flux; • slurry; • calcine; • molten metal; • natural gas; • chemicals; • high energy sources such as: - electricity - temperature - pressure - friction - radiation • airborne hazards; - dust - mist - fume - smoke • structural deterioration or rusting of:	Inspect the workplace for hazardous or potentially hazardous conditions and take corrective action following company procedures (ref. O.H.S.A.) which shall include: • wearing required personal protective equipment; • guarding all identified hazards: - ropes - barriers - barricade tape - personnel - signs • cleaning up spills or leaks as required; • removing the hazard; • reporting the condition to appropriate personnel.

COMMON CORE FOR NON PRODUCTION WORKERS IN A SMELTER OPERATION - MINERAL ORE

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
- stairways - walkways - floors - platforms Recognize hazards associated with the above such as: • slipping; • falling; • fire; • burns; • respiratory; • toxicity; • explosion; • personal injury; • electrical shock. Determine procedures for: • cleaning up spills and leaks; • reporting; • guarding and safety precautions to be observed (Ref. O.H.S.A.)	

U1591.02 WEAR A FALL ARREST SYSTEM

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine procedures for wearing, adjusting and maintaining fall arrest system. Determine situations requiring the wearing of fall arrest system (Ref. O.H.S.A.).	Correctly select, adjust, use, wear, and maintain a fall arrest system (ref. O.H.S.A.).

U1591.03 MANUALLY LIFT AND CARRY MATERIALS AND SUPPLIES

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine proper lifting and carrying procedures with respect to: • size and weight of article to be lifted/moved; • physical limitations; - using legs rather than back - lifting with a smooth motion - bending knees - carrying load close to body - turning body rather than twisting • conditions in area of lift and carry.	Manually lift and carry materials and/or supplies following company procedures which shall include: • ensuring good footing; • ensuring clear vision and unobstructed path for movement; • wearing gloves to protect hands and fingers; • lifting within one's physical limitations; • wearing personal protective equipment; • avoiding pinch points.

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U1591.04 CONFINED SPACE ENTRY

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine the procedure for confined space entry with respect to: - conducting pre-entry checks; - protective equipment; - ventilation and lighting (as applicable); - warning devices; - permits; - guarding; - precautions to be observed; - reporting; - communications. Determine situations requiring the wearing of fall arrest and/or retrieval system. Determine situations requiring use of self contained breathing apparatus or air-line breathing system (ref. O.H.S.A.).	Demonstrate a knowledge of confined space entry following company procedures and O.H.S.A. which shall include: - tagging in/out; - wearing required personal protective equipment; - wearing fall arrest and/or retrieval system as required (ref: O.H.S.A.); - conducting pre-entry checks; - ensuring the locking out of equipment (ref. module: Safety: Protect Self and Others) - ensuring tagging as applicable (ref module: Safety: Protect Self and Others), - ensuring required ventilation and lighting in work area (as applicable); - posting signs (as applicable); - ensuring warning devices in place and operative; - communicating readiness to enter work area to appropriate personnel; - ensuring safe entry and exit from work area; - ensuring an air quality test is completed as required; - reporting any defects, and/or hazards to appropriate personnel; - completing entry permit report(s); - ensuring the posting of stand-by personnel (guard) as required; - ensuring a person adequately trained in Artificial Respiration is conveniently available (as required).

U1591.05 WORK SAFELY AROUND OPERATING EQUIPMENT

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Identify smelter operating equipment such as: - conveyor systems; - central control room; - grizzlies; - bulk storage bins; - tanks; - crushing systems; - pumps; - filters; - thickeners;	Demonstrate the knowledge and skills required to work safely around operating equipment following company procedures and O.H.S.A. which shall include: - wearing required personal protective equipment (in good condition); - wearing proper clothing (not loose or torn, not nylon, rayon or polyester); - observing safety signs; - observing warning signals and devices including remote controls;

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ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
• agitators; • roasters; • electrostatic precipitators (ESP) /Cottrell; • baghouse; • drag conveyors; • furnaces; • electrodes; • slag disposal equipment; • molten metal granulation equipment; - slag - matte • furnace tapping chutes and hot metal launders; • cranes; - production - service • ladles; • molten metal vessels; • matte moulds; • transfer car(s); • slag/matte hauler; • fans/blowers/compressors; • vacuum pumps; • off-gas systems; • pneumatic conveying system(s). Determine procedures for working around operating equipment with respect to: • safety equipment; • guards and barricades; • safe handling of tools and equipment; • reporting hazards; • communications; • movement; • remote control. Determine the procedures/hazards associated with the locking out of computer and radio controlled equipment. Determine the hazards of wearing loose or torn clothing. Determine company emergency procedures with respect to: • fire; • personal injury; • evacuation; • fugitive emissions/accidental gas release; • explosions; • molten metal spill.	• using designated travel ways only; • staying outside of guarded and barricaded area(s); • ensuring proper handling of tools and equipment; • working from a safe location only; • crossing over/under conveyors at designated areas only (as applicable); • communicating with other workers as required; • reporting hazardous or potentially hazardous conditions to appropriate personnel.

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U1591.06 WORK SAFELY AROUND HAZARDOUS MATERIALS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Identify hazardous materials such as: - lime; - acid; - cleaning solvents; - glues; - designated substances (Ref. O.H.S.A.); - oxygen; - ammonia; - nitrogen; - process/cooling water; - parting agents; - sulphur dioxide; - sulphur trioxide; - natural gas. Determine hazards associated with exposure to the above with respect to: - burns; - respiratory; - toxicity; - fire; - explosion. Determine procedures for and precautions to be observed while working around hazardous materials including protective equipment (ref. WHMIS labels and Materials Safety Data Sheets) such as: - liquids; - toxic - corrosive - combustible/flammable - solvents - adhesives - solids;	Demonstrate the knowledge and skills required to work safely around hazardous materials following company procedures and O.H.S.A. regulations which shall include: - protecting self and others; - wearing required personal protective equipment; - practising personal hygiene; - locating: - emergency flush showers - eye wash fountains/stations, - first aid station(s), - antidote and wash stations/fountains (ref. O.H.S.A.) - emergency phone numbers - communicating with other workers as required; - observing warning signals alarms and signs; - taking appropriate action such as: - reporting hazardous or potentially hazardous conditions to appropriate personnel, - removing hazardous conditions. - guarding area of hazardous and/or potentially hazardous conditions.

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ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
- toxic - corrosive - combustible/flammable - spontaneously combustible • gases; - toxic - corrosive - oxygen displacing - flammable - asphyxiant Determine company procedures for use of emergency treatment with respect to: • emergency flush showers; • eye wash fountain/station; • antidotes and washes (ref. O.H.S.A.). Drink only from potable water supply. Determine and locate communication systems such as: • telephone; • two way radio; • evacuation pull station; • emergency exit(s).	

U1591.07 WORK SAFELY AROUND ENERGY SOURCES

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Identify energy sources such as: • gases; - combustible - compressed • hydraulic; • steam; • electrical; • fuels; • friction;	Demonstrate the knowledge and skills required to work safely around energy sources following company procedures which shall include: • wearing proper clothing (not loose or torn, not synthetic such as nylon, rayon, polyester); • wearing required personal protective equipment in good condition; • observing warning signs, signals, and/or alarms; • communicating with others as required; • reporting hazardous or potentially hazardous

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ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
- radioactive material. Determine the hazards of each energy source such as: - burns; - explosion/implosion; - electrocution; - shock; - asphyxiation. Determine procedures for working around high energy sources and precautions to be observed with respect to: - safety protective equipment; - guards and barricades; - reporting hazards; - communication; - movement.	conditions; - working only in authorized and safe locations - initiating emergency response as required.

U1591.08 WORK SAFELY AROUND MOBILE EQUIPMENT

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Identify equipment such as: - overhead cranes/hoists; - forklift trucks; - front end loader (tires/crawler); - skid steers; - trucks/cars; - boom trucks; - rail car(s); - slag/matte haulers; - front end loaders (articulated); - excavator (equipped with breaker); - locomotives; - scissor trucks; - sweepers; - mobile elevated work platform.	Demonstrate the knowledge and skills required to work safely around mobile equipment following company procedures which shall include: - obeying vehicle warning signals, alarms and/or signs; - yielding right of way to vehicle; - remaining visible and maintaining a safe distance; - staying clear of suspended loads(s); - reporting any hazardous or potentially hazardous conditions to appropriate personnel; - recognizing pinch points.

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ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine procedures to be observed and precautions to be taken when working around mobile equipment with respect to: • signals; • movement; • reporting; • communication; • power lines (over-head, beside and/or buried); • gas/liquid piping (over-head, beside and/or buried).	

U1591.09 CLEAN UP AROUND CONVEYORS

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Identify various types of conveyors such as: • drag; • belt; • paddle; • bucket; • pneumatic; • screw; • pan feeder. Identify the name, function, and location of the principal components of a conveyor such as: • conveyor belt; • screw; • drag link; • bucket • emergency pull cord; • pulleys and idlers; • chutes; • scrapers; • guards; • shuttle/tripper; • counter weight(s); • stop/start, forward/reverse station; • automatic/remote start/stop; • interlocks.	Clean up around an operating belt conveyor following company procedures which shall include: • wearing required personal protective equipment; • wearing proper clothing (not loose or torn); • working from a safe location only; • facing proper direction; • keeping tools and self a safe distance away from the conveyor; • ensuring lock and tag procedures are performed when cleaning in critical areas; (as applicable); • loading conveyor on incline ensuring proper footing and correct disposition of materials to prevent hazardous spillage; • breaking up jams or blockages only when conveyor stopped and locked out and tagged; • ensuring guards remain in place; • staying off the conveyor; • crossing over/under at designated areas only; • communicating with fellow workers as required; • reporting any hazards and/or defects to appropriate personnel; • activating pull cord to shut down conveyor in an emergency situation and reporting the incident to appropriate personnel.

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ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Select and maintain proper tools and work within the limitations of tool(s) and self. Determine hazards or potential hazards of working around a moving conveyor and components such as • belts; • pulleys and idlers; • shuttle (if applicable); • loading on an incline; • unsuspected movement resulting from stored (potential) energy caused by a jam/blockage in the system;. • pinch points; • belt dressing. Determine procedures for: • observing start-up alarm including remote/automatic start-up; • emergency shut-down; • reporting; • cleaning around conveyor; • lock-out and tag. Determine situations requiring emergency shutdown such as: • discharge points plugged; • foreign material on belt and/or magnet; • improper tracking of belt; • damage to equipment; • hazards and injuries.	

U1591.10 WORK SAFELY AROUND HOT DUST

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine and identify hazardous or potentially hazardous conditions associated with hot dust and runs of hot dust. Determine personal protective equipment required to work around hot dust such as: • woolen pants and shirt; • high heat mitts;	Work around hot dust following company procedures and government regulations which shall include: • wearing required personal protective equipment such as respiratory (ref. O.H.S.A.); • ensuring safety of self and others.

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ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
• long leg and long sleeve underwear; • heat reflecting hood and jacket; • face shield, glasses, goggles; • approved footwear; • spats; • wrist protectors; • neck protectors (Nomex); • skull cap; • respiratory protection. Determine and identify hazardous and/or potentially hazardous conditions associated with plugged drag discharges, cyclones, horizontal flue and roaster discharges and inspection doors.	

U1591.11 WORK SAFELY AROUND MOLTEN METAL

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine personal protective equipment to be used such as: • fibreglass hardhat; • woolen pants and shirts; • bailman's jacket; • mitts (high heat); • long leg and long sleeve underwear; • leather apron; • heat reflecting chaps; • heat reflecting hoods and jackets; • leather spats; • heat reflecting shield (clear or tinted) and situations requiring the use of same. Determine and identify hazardous or potentially hazardous conditions associated with molten metal with respect to: • hot sparks; • molten slag and/or matte; • molten metal and moisture; • molten metal run-out; • molten metal fumes; • heat radiation; • heat exhaustion.	Work around molten metal following company procedures and government regulations which shall include: • wearing required personal protective equipment (ref. O.H.S.A.); • using designated travel ways only; • working from a safe location and/or position only; • take precautions to prevent contact between molten metal and damp surfaces (ref. O.H.S.A.); • taking appropriate action such as: - reporting hazardous and/or potentially hazardous conditions to appropriate personnel - removing hazardous and/or potentially hazardous conditions - guarding hazardous and/or potentially hazardous conditions - evacuating following company procedures.

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U1591.12 FOLLOW COMPANY EVACUATION PROCEDURES

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine types of emergencies such as: • fire; • break-out; • spill(s); • gas leak(s); • explosions/implosion. And procedures to be followed such as: - evacuation - assembling in designated area - communicating emergency to appropriate personnel.	Demonstrate the skills required to follow company emergency evacuation procedures in a real or simulated emergency which shall include: • evacuation of building; • assembling in designated area; • communicating emergency to appropriate personnel.

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PERFORMANCE DEMONSTRATION GUIDELINE

Trainee's / Worker's Name: _____

Emp. # _____

U1591.0 WORK SAFELY IN A SMELTER ENVIRONMENT

TASKS	DATE COMPLETED	INSTRUCTOR'S SIGNATURE	TRAINEE'S/ WORKER'S SIGNATURE
U1591.01 Deal with Hazardous/Potentially Hazardous Conditions	-		
U1591.02 Wear a Fall Arrest System.	-		
U1591.03 Manually Lift and Carry Materials and Supplies	-		
U1591.04 Confined Space Entry	-		
U1591.05 Work Safely Around Operating Equipment	-		
U1591.06 Work Safely Around Hazardous Material	-		
U1591.07 Work Safely Around Energy Sources	-		
U1591.08 Work Safely Around Mobile Equipment	-		
U1591.09 Clean Up Around Conveyors	-		
U1591.10 Work Safely Around Hot Dust	-		
U1591.11 Work Safely Around Molten Metal	-		
U1591.12 Follow Company Evacuation Procedures	-		

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U1596.0 DEAL WITH DESIGNATED AND OTHER HAZARDOUS SUBSTANCES

GENERAL PERFORMANCE OBJECTIVE

Deal with designated and hazardous substances safely and efficiently. All tasks must be done in compliance with applicable acts, regulations, standards and company standards.

U1596.01 DEAL WITH DESIGNATED AND OTHER HAZARDOUS SUBSTANCES

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Identify designated substances by considering/recognizing the following: • label; • where stored; • type and shape of container; • placards. Identify warning symbols such as: • flammable; • explosive • poison; • corrosive. Determine the hazards of handling substances with respect to: • burns; - thermal - chemical • contamination; - absorption - inhalation - ingestion • explosion; • non-compatible mixtures. Determine which designated substances are present in given situations and their location (eg. silica, lead, arsenic etc.). Determine safety precautions to be observed when working around designated substance (ref. O.H.S.A., WHMIS and Designated Substances Regulations).	Deal with hazardous or potentially hazardous conditions relating to designated substance following company procedures which shall include: • wearing required personal protective equipment; • identifying hazardous or potentially hazardous conditions; • ensuring adequate ventilation; • assessing the severity of the condition and taking corrective action by: - reporting condition(s) to appropriate personnel - guarding all identified hazardous conditions - evacuating the area - cleaning up spills and leaks. • ensuring follow-up action to ensure the safety of self, others, equipment and the environment.

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ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine procedures for taking appropriate action to remove hazardous conditions with respect to: • cleaning up spills/leaks; • reporting; • guarding; • follow-up action; • non-compatible mixtures; • evacuation; • ventilation. Identify the need for assessment where designated substance are present. Explain the control program(s) with respect to: • engineering control; • work practices; • hygiene practices and facilities; • health effects; • monitoring; • medical surveillance; • personal protective equipment.	

U1596.02 HANDLE DESIGNATED AND OTHER HAZARDOUS SUBSTANCES

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine procedures for handling hazardous substances and safety precautions to be observed with respect to: • lifting; • loading; • transporting; • unloading; • reporting; • personal hygiene; • non-compatibles. Determine applicable materials safety data sheets (WHMIS/O.H.S.A.).	Handle materials containing hazardous substances following company procedures which shall include: • wearing required personal protective equipment; • lifting within one's personal limitation; • loading material containing hazardous substances and securing into suitable containers for transportation (if applicable); • ensuring safe transportation of hazardous substance to required destination; • ensuring safe disposal of material containing designated substances in required storage or mixing area (as applicable); • reporting abnormal conditions to appropriate personnel; • practicing personal hygiene; • ensuring the protection of self, others, equipment and the environment.

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U1596.03 PRACTICE EMERGENCY PROCEDURES

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine situations requiring the use of eye wash fountains and emergency safety showers and procedures for using same. Locate emergency stations such as: • eye wash stations; • first aid; • emergency showers; • antidote; • immersion bath.	Demonstrate the skills to follow company emergency procedures which shall include: • wearing required personal protective equipment; • reporting emergency incidents; • ensuring eye wash stations/fountains and safety showers functional; • using eye wash stations; • using emergency showers; • seeking medical assistance as soon as possible.

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U1596.0 DEAL WITH DESIGNATED AND OTHER HAZARDOUS SUBSTANCES

TASKS	DATE COMPLETED	INSTRUCTOR'S SIGNATURE	TRAINEE'S/ WORKER'S SIGNATURE
U1596.01 Deal with Designated and Other Hazardous Substances	-		
U1596.02 Handle Designated and Other Hazardous Substances	-		
U1596.03 Practice Emergency Procedures	-		

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U1597.0 OPERATE ELEVATORS

GENERAL PERFORMANCE OBJECTIVE

Operate elevators to move material, supplies, equipment and personnel. All work must be done in compliance with applicable acts, regulations, standards and company standards.

U1597.01 INSPECT ELEVATOR

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Identify name, function, use and limitations of components of an elevator such as: • telephone; • anti-crushing edge; • stop/start button; • emergency stop button; • emergency alarm(s); • inspection door; • ventilation fan; • doors; • lighting; • manual/automatic selector switch(s) and describe their function. Determine procedures for conducting a pre-operational inspection and identify items to be checked and precautions to be observed.	Visually inspect the elevators (freight and passenger) following company procedures which will include: • checking for damages to: - doors, - floors, - controls, • listening for unusual noises; • ensuring doors open and close properly; • telephone operating; • ensuring adequate lighting and ventilation; • assessing the severity of any damage/malfunction and taking appropriate action which shall include: - reporting condition to appropriate personnel - removing hazardous condition(s) - guarding the area. • verifying position of manual/automatic selector switch(s) (as applicable).

U1597.02 LOAD FREIGHT ELEVATOR

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine procedures for loading materials, supplies and equipment with respect to: • balancing and securing load; • authorized personnel on elevator; • precautions to be observed; • manual/automatic selector switch(es) (as applicable).	Load materials, supplies and equipment following company procedures which shall include: • separating materials; • balancing load; • securing load; • loading within equipment limitation (weight and dimensions); • switching automatic selector switch to "off" (as required); • returning automatic selector switch to normal when job is complete (as required).

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U1597.03 LOAD ELEVATOR PERSONNEL

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine procedures for loading personnel onto elevator and precautions to be observed.	Load personnel into elevator following company procedures which shall include: • keeping elevator access clear of materials and equipment; • allowing loading within the posted limitation of the elevator; • automatic function(s) operational (as applicable).

U1597.04 OPERATE ELEVATOR

ENABLING OBJECTIVES	PERFORMANCE OBJECTIVES
Determine procedures for operating elevator with respect to: • operational checks; • starting/stopping; • emergency stop(s); • automatic function(s) operational; • manual function(s) operational.	Operate elevator to transport materials, supplies, equipment and/or personnel by following company procedures which shall include: • listening for unusual noise(s); • sensing unusual vibrations; • ensuring proper elevator operation; • stopping elevator at required locations(s); • avoiding pinch points (e.g. doors); • reporting any defects to appropriate personnel; • operating controls in proper sequence; • leaving doors closed when vacating elevator; • returning automatic function(s) to normal before vacating elevator (as required).

NOTE: *Follow company procedures for elevator use in case of an accident, fire, emergency evacuation, and elevator servicing.*

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PERFORMANCE DEMONSTRATION GUIDELINE

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U1597.0 OPERATE ELEVATORS

TASKS	DATE COMPLETED	INSTRUCTOR'S SIGNATURE	TRAINEE'S/ WORKER'S SIGNATURE
U1597.01 Inspect Elevator	-		
U1597.02 Load Freight Elevator	-		
U1597.03 Load Elevator Personnel	-		
U1597.04 Operate Elevator	-		